

In the Drawing

In a separate Letter to the Official Draftsperson (copy attached), certain changes to the drawing have been proposed. Applicants submit herewith amended FIGURES 5 and 7 for the Examiner's approval. FIGURES 5 and 7 have been amended to correct certain textual errors. No new matter has been added.

REMARKS

As a result of the outstanding Office Action, claims 1-14 stand rejected. Claims 1-6, and 8-14 have been amended. Claim 7 continues unamended. Claims 1-14 are presented for reconsideration.

Voluntary amendment to the Drawing

In a separate letter to the Official Draftsperson (copy attached), certain changes have been proposed with respect to FIGURES 5 and 7, subject to the Examiner's approval. The amendments are made to correct textual errors. ANNOTATED SHEETS and REPLACEMENT SHEETS are attached.

With respect to FIGURE 5, it can be seen from the corresponding calculations on page 15, lines 26-28, that the voltage at the collector of Q1 should be labeled "3.48 V". Also, the upper occurrence of the "3.48 V" text in the right-hand side of the FIGURE 5, has been rotated 90 degrees for easier reading. The lower occurrence of the "3.48 V" text in the right-hand side of the FIGURE 5, has been deleted.

With respect to FIGURE 7, it can be seen from the corresponding text on page 16, lines 17-19, that the current through RL should be labeled "53 ma".

No new matter has been added.

Voluntary amendment to the Specification

Applicants hereby submit an amended version of the paragraph appearing on page 15 of the specification between lines 10 and 28. The text on lines 24 and 25 of this paragraph has been amended to correct typographical errors. The errors are immediately apparent from the calculations shown on the page. For example, 400 mv and 1900 mv do not add up to 2.48 v, but rather add up to 2.3 v.

Similarly, RL is said to have a value of 40 ohms. 38 ma through 40 ohms causes a voltage drop of 1.52 volts. Therefore, the voltage at the collector of Q1 should be (5v -1.52 v = 3.48v), not 3.1 volts, as incorrectly typed. The correct voltage of 3.48 V is shown in FIGURE 5 as filed.

No new matter is added

Voluntary amendment to the claims

Claims 1-6 and 8-14 have been amended to more clearly and more precisely define the subject matter of the invention. No new matter has been added.

Objection to the Abstract Under MPEP § 608.01(b):

The Abstract stand objected to under MPEP § 608.01(b) for failing to be in the range of 50 to 150 words in length. The Abstract has been amended to conform to the requirement of MPEP § 608.01(b). No new matter has been added.

In view of the amendment to the Abstract, Applicants submit that the grounds for the objection have been overcome and respectfully request that the objection be withdrawn.

Provisional Rejection of Claims 1 and 4 for Obviousness-type Double Patenting

Claims 1 and 4 stand rejected under the judicially-created doctrine of obviousness-type double patenting and being unpatentable over claims 1 and 14-15 of copending Application No. 10/323,503. Applicant submits herewith a Terminal Disclaimer under 37 C.F.R. 1.321(c) (copy attached). Applicant submits that conflicting patent application 10/323,503 is commonly owned with the subject application, by virtue of an Assignment Declaration in each application (copies attached) assigning all right title and interest in the inventions to Tektronix, Inc. The Assignment Declaration in each application will be submitted for recording when a Notice of Allowance is received.

In view of the submission of the Terminal Disclaimer Applicants respectfully submit that the grounds for the rejection have been overcome, and respectfully request that the provisional rejection be withdrawn.

Rejection of Claims 1-14 Under 35 U.S.C. 102(e).

Claims 1-14 stand rejected under 35 U.S.C. 102(e) as being anticipated by Tan, et al. ('688). Claims 1-6, and 8-14 have been amended. Claim 7 continues unamended.

Specifically, it was said in the outstanding Office Action that FIGURE 1 of Tan, et al. ('688) (hereinafter Tan) shows a system for triggering a plurality of test and measurement instruments. However, column 2, lines 47-50, of Tan describe FIGURE 1 as showing "a high level block diagram of a signal acquisition system", specifically, "a digital storage oscilloscope" (emphasis added). That is, FIGURE 1 of Tan shows only a single test and measurement instrument, and teaches nothing about a system comprising multiple test and measurement instruments.

Applicants submit that the rejection is based upon a misconception that the terms "acquisition unit" and "signal acquisition system" are synonymous. They are not. Tan is internally consistent in the use of this terminology in that FIGURE 1 is said to show a high level

block diagram of an acquisition system (column 2, lines 15-17, and 46-50), comprising a “first acquisition unit **120**” (column 2, line 63). Thus, Tan uses the two terms to refer to a test and measurement instrument, and the term “first acquisition unit” to refer to circuitry included within the test and measurement instrument, where that circuitry comprises at least a decimator, and associated acquisition memory.

Similarly, the subject application discusses, on page 1, lines 10-11, “signal acquisition devices” such as digital storage oscilloscopes. Note that FIGURE 1, shows “N” scopes (i.e., oscilloscopes), wherein each of the scopes includes an acquisition unit **113**. Clearly, both Tan and the subject application use this terminology in the same fashion. In view of all of the above, Applicants submit that Tan does not show a system for triggering a plurality of test and measurement instruments, as was set forth in the outstanding Office Action, and does not solve the problem of triggering two or more of such test and measurement instruments.

Moreover, Applicants cannot understand how controller **130** of Tan could possibly be said to be a respective “pair of transceivers”. Reference numerals **132** through **134** are functions controlled by a single controller **130**. No transceiver at all is shown in FIGURE 1 of Tan.

Applicants also cannot understand how functions **132** through **134** of Tan can possibly be said to be a series combination of variable impedance devices. There is no such teaching in Tan.

Applicants further cannot understand, by any stretch of the imagination, how input unit **160** of Tan (which is described as a keypad, or pointing device) can be called a constant current source!

Finally, no cable, carrying trigger signals in mutually opposite directions, is shown in FIGURE 1 of Tan, or discussed anywhere in Tan.

That is, Tan does not teach, show, or remotely suggest:

“ a first test and measurement instrument having . . . , an output for developing a trigger enable signal, and an input for receiving a combined trigger signal;

a second test and measurement instrument having . . . , an output for developing a trigger enable signal, and an input for receiving a combined trigger signal; and

circuitry for logically combining said trigger enable signals of said first and second test and measurement instruments to generate said combined trigger signal;

wherein each of said test and measurement instruments is coupled to said circuitry for combining via a cable connecting a respective pair of transceivers, and said trigger enable signal and said combined trigger signal are conveyed in mutually opposite directions through said cable; and

said first and second test and measurement instruments acquiring data samples of said signals under test in response to said combined trigger signal. (as called for in claim 1).

With respect to Claim 4, Applicants submit that Tan shows no event decoder coupled to DATA1 input or to DATA2 input. FIGURE 1 of Tan shows DATA1 input and DATA2 input coupled to A/D converter 110₁ and 110₂, respectively. An A/D converter converts an analog signal into a digital representation of that signal. An A/D converter does not examine those signals to detect a logical triggering event. Thus, Tan does not teach, show, or remotely suggest,

“a plurality of signal acquisition devices, each of said signal acquisition devices comprising an event decoder, for monitoring at least one respective input signal to determine whether a logical triggering event has occurred, and a transceiver, for transmitting indicium of the occurrence of said logical triggering event and for receiving a trigger signal; and

a trigger controller, comprising a plurality of transceivers operative to receive said logical triggering event indicia transmit said trigger signal, and a logical processing device for combining said logical triggering event indicia to produce therefrom said trigger signal.”

For all of the above reasons, Applicants submit that Tan, et al. ('688) cannot, and does not, anticipate claims 1-14 of the subject application, and respectfully request that the rejection of claims 1-14 under 35 U.S.C. 102 (e) be withdrawn.

Additional Fees: No fee other than the extension fee is believed due. However, if an additional fee is due, please charge that fee to Deposit Account 20-0352.

Submission of Office Action and Response in Serial No.10/323,503

In compliance with *Dayco Products Inc.*, Applicants hereby submit a copy of the Office Action and response in related application serial no. 10/323,503.

Conclusion:

In view of all of the above, Applicant submits that the subject application is in a condition for allowance, and respectfully requests such action.

Respectfully submitted,

Que Thuy Tran, et al.

By: Thomas F. Lenihan

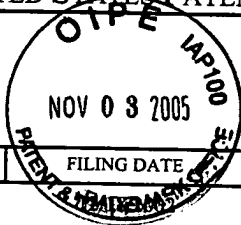
Thomas F. Lenihan
Reg. No. 32,152
(503) 627-7266 (Voice)
(503) 627-7119 (Fax)

01 November 2005
Tektronix, Inc.
P.O. Box 500
Delivery Station 50-LAW
Beaverton, OR 97077



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/323,503

7590

09/30/2005

Que Thuy Tran

7283-US

8542

Thomas F. Lenihan
TEKTRONIX, INC.
P. O. Box 500, M/S 50-Law
Beaverton, OR 97077-0001

Received Tektronix, Inc.

OCT 03 2005

LAW DEPARTMENT

EXAMINER

NGHIEM, MICHAEL P

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

HOLIDAY DATE 12/16/05
★ RE 12/30/05

Office Action Summary

NOV 08 2005

Application No.

10/323,503

Applicant(s)

TRAN ET AL.

Examiner

Michael P. Nghiem

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2005 and 06 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 14-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 is/are allowed.
- 6) ☒ Claim(s) 14, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 15-18, 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

The Communications filed on August 1, 2005 has been acknowledged.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 6, 2005 has been entered.

Claim Objections

Claim 10 is objected to because of the following informalities: "claim4" (line 1) should be – claim 4 --. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2863

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 14, 19, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Tan et al. (US 6,812,688).

Regarding claim 14, Tan et al. discloses an apparatus (Fig. 1) comprising:

- an event decoder (110's) for receiving an input signal (DATA1, DATA2) and generating therefrom a logical event indicative signal (DATA1', DATA2');
- an acquisition unit (120's) for acquiring at least a portion of said input signal in response to a trigger signal (T) (Fig. 1);
- said trigger signal generated in response to the occurrence of said logical event indicative signal and an external trigger signal (output of 142, input to 146) generated using said logical event indicative signal (column 4, lines 42-45).

Regarding claim 19, Tan et al. discloses that at least one the signal acquisition device includes a display device (130) for displaying at least one respective input channel signal (Fig. 1).

Regarding claim 20, Tan et al. discloses that:

- said event decoder comprises a first event decoder (110_1) and a second event decoder (110_2);

- said first event decoder generating a first logical event indicative signal (DATA_1') for use by an external trigger controller (148) in response to the occurrence of a corresponding logical event in said input signal (Fig. 1);

- said second event decoder generating a second logical event indicative signal (DATA_2') for use by said acquisition device in response to the occurrence of said the corresponding logical event in said input signal and said external trigger signal (Fig. 1).

Allowable Subject Matter

Claims 15-18, 21, and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-10 are allowed.

Reasons For Allowance

The combination as claimed wherein circuitry for logically combining said first and second trigger enable signals to generate a combined trigger signal; said first and second test and measurement instruments acquiring data samples of said first and

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second signals under test in response to said combined trigger signal (claims 1, 4) or a trigger controller for combining said logical event indicative signal with another logical event indicative signal from another device to produce therefrom said external trigger signal (claim 15) or said apparatus is used within each of a plurality of signal acquisition devices (claims 16, 18, 22) or a trigger logic unit for synchronizing the trigger signal applied to the acquisition unit with said external trigger signal (claim 21) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

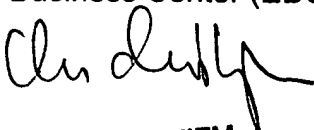
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-H.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2863

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

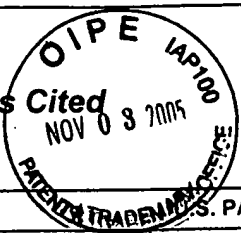


MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

September 29, 2005

Notice of References Cited



Application/Control No.

10/323,503

Applicant(s)/Patent Under
Reexamination
TRAN ET AL.

Examiner

Michael P. Nghiem

Art Unit

2863

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,812,688	11-2004	Tan et al.	324/121R
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

ANNOTATED Sheet

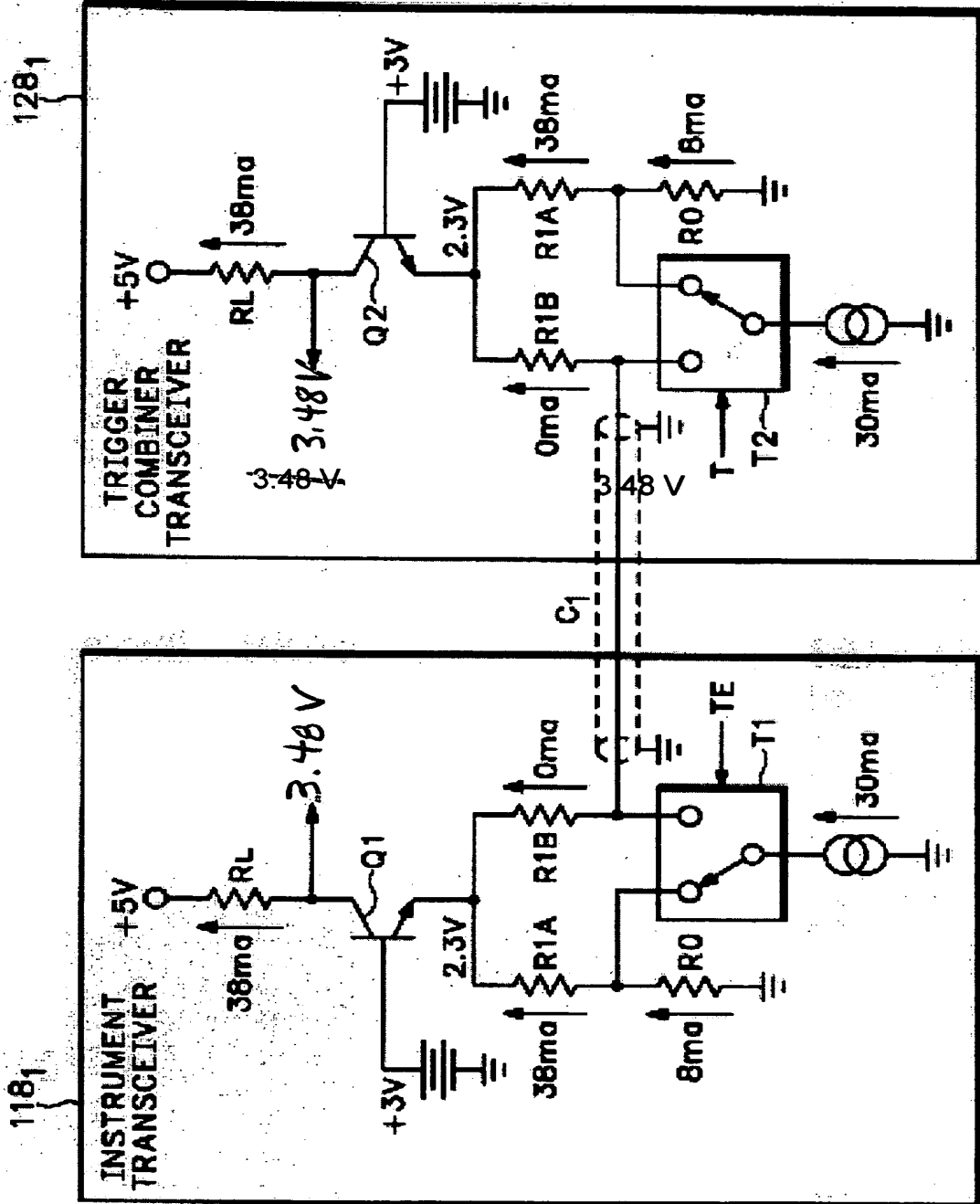


FIG. 5

ANNOTATED Sheet

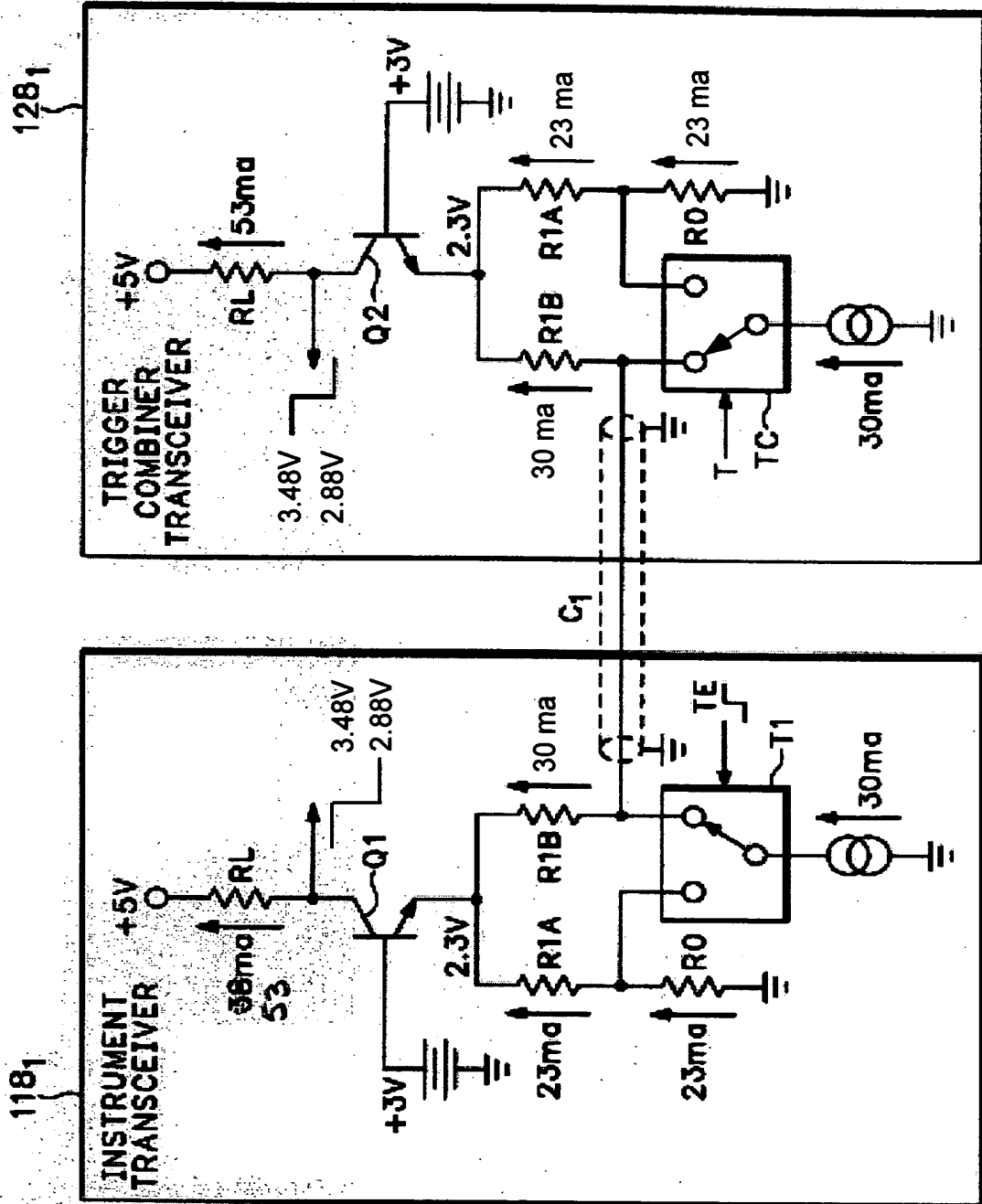


FIG. 7